

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 4/18/2013 Page 1 of 2

TO: Tony Anziano, Program Manager /			FILE: E.A. 04 - 0120F4	
FROM: Darryl Schram, Senior TE			CO-RTE-PM SF-80-13.2/13.9	
FED. NO. No				
CCO#: 257	SUPPLEMENT#: 0	Category Code: CHPA	CONTINGENCY BALANCE (incl. this change) \$88,321,793.04	
COST: \$1,536,378.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Cable Railing (Field Work)			PROJECT DESCRIPTION: CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE	
Original Contract Time: 2490 Day(s)	Time Adj. This Change: 0 Day(s)	Previously Approved CCO Time Adjustments: 501 Day(s)	Percentage Time Adjusted: (including this change) 20 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 3

THIS CHANGE ORDER PROVIDES FOR:

Installing additional and revised cable railing in accordance with revised plan sheets in Contract Change Order (CCO) 188 "OBG Safety Railing (Furnish)." Also installing "NOT FOR TIEOFF" plaques on cable railing, applying heat-shrink plastic boots to the cable at fitting connections, installing gates at crossbeams, and applying paint and caulk to cable railing items. Providing a credit for installation of hinged safety railing on crossbeams. Also, performing additional revisions to the cable railing during fabrication and resolving conflicts identified during field installation. Eliminating bid item cable railings on the Orthotropic Box Girder.

This change order will install revised cable railing that was fabricated under CCO 188 "OBG Safety Railing (Furnish)" for the Orthotropic Box Girder (OBG), crossbeams, and Pier W2 cap beam. OBG cable railing installation will be modified due to taller inboard cable railing, revised post spacing, increased cables per railing section, and new holes will be drilled in deck plates for base plates. A credit will be provided for the OBG cable railing that was to be furnished and installed per original contract. Cable railing will be installed on crossbeams, in lieu of hinged safety railings to maintain the desired aesthetic appearance. Hinged safety railing has already been fabricated and delivered to the project so there will only be a credit for installation. Cable railing will be added to the W2 Cap Beam to enhance maintenance access.

Signs will be posted to alert maintenance staff that cable railings are not intended or designed to be safety tie-off points. Lockable gates will be installed at crossbeams to provide maintenance access and prohibit unauthorized access. Heat-shrink plastic boots will be installed to prevent water and dirt from entering fittings. The galvanized railing will be covered by white plastic coating and railing attachments, turnbuckles, welds, and bolts will be painted white to match the rest of the bridge.

Larger diameter posts will be installed in lieu of cross bracing at OBG cable railing ends and at locations with increased post height to accommodate mechanical and electrical items. Increased post sections require wider base plates, therefore some of the bolt holes already drilled in the deck plates will be unusable. Abandoned bolt holes located under base plates will be caulked and abandoned bolt holes not covered by base plates will be plugged with bolts. Caulk will also be applied around base plates to prevent water intrusion.

This change order will also revise fabrication of the cable railing to resolve conflicts that were identified during the RFI and Submittal process, including RFIs 3019 and 3038. Welded pad eyes will be added due to interference with eye bolts at cable terminations. Support brackets will be added and base plates will be revised to resolve interference between the longitudinal ductile iron pipes and cable railing posts at Panel Point (PP) 9.5. Additional force account funds will be provided to resolve minor conflicts that will be identified during installation.

The total cost of this change order is \$1,786,378.00 lump sum, \$200,000.00 force account, and credit of (\$450,000.00) decrease in contract item for a total of \$1,536,378.00, which can be financed from the contingency fund. A detailed cost analysis is on file.

No time adjustment is warranted as this change order does not affect the controlling operation.

This change order has concurrence from William Casey (Supervising TE), Ken Terpetra (Project Manager), Tony Anziano (Program Manager), Rich Foley (HQ Oversight), Wenyi Long (Bridge Design), Lina Ellis (Maintenance), and Jing Chen (District Design).

CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120F4 CCO: 257 - 0

DATE: 4/18/2013 Page 2 of 2

Toll Bridge Program Oversight Committee (TBPOC) approved this change order on April 11, 2013, in the amount of \$1,536,378.00.

CONCURRED BY:			ESTIMATE OF COST		
Construction Engineer:	William Casey, Sup TE	Date 7/18/12	ITEMS	THIS REQUEST	TOTAL TO DATE
Bridge Engineer:	CT Oversight, Wenyi Long, P.E.	Date 7/18/12	FORCE ACCOUNT	(\$450,000.00)	(\$450,000.00)
Project Engineer:	District Design, Jing Chen	Date 7/18/12	AGREED PRICE	\$200,000.00	\$200,000.00
Project Manager:	Proj Manager, Ken Terpstra	Date 7/18/12	ADJUSTMENT	\$1,786,378.00	\$1,786,378.00
FHWA Rep.:	HQ, Rich Foley	Date 7/18/12	TOTAL	\$0.00	\$0.00
Environmental:		Date		\$1,536,378.00	\$1,536,378.00
Other (specify):	HQ, Jon Tapping	Date 7/23/12	FEDERAL PARTICIPATION		
Other (specify):	Struct. Maint, Lina Ellis	Date 7/18/12	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING		
District Prior Approval By:	HQ, Sey Hossnieh	Date 7/23/12	FEDERAL SEGREGATION (If more than one Funding Source or P.I.P. type)		
HQ (Issue/Approve) By:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS		
Resident Engineer's Signature:		Date	FEDERAL FUNDING SOURCE PERCENT _____ _____ _____		

[Signature] 4-18-13



California Department of Transportation

CONSTRUCTION DIVISION

TO: District 4 CCO Desk

Date: 4/19/2013

Contract No.: 4 - 0120F4

Road: SF-80-13.2/13.9

FED. No.: NONE

To: SARTIPI - 04

Attention: 04 - PATEL

HQ Direction:

TO ISSUE AND APPROVE

CCO No. 257

Sup. No. 0

Rev. No. 0

Per Your Submittal Dated: 4/18/2013

CCO Category Code: C - H - P - A

INSTALLING ADDITIONAL AND REVISED CABLE RAILING IN ACCORDANCE WITH REVISED PLAN SHEETS IN CONTRACT CHANGE ORDER (CCO) 188 "OBG SAFETY RAILING (FURNISH)." ALSO INSTALLING "NOT FOR TIEOFF" PLAQUES ON CABLE RAILING, APPLYING HEAT-SHRINK PLASTIC BOOTS TO THE CABLE AT FITTING CONNECTIONS, INSTALLING GATES AT CROSSBEAMS, AND APPLYING PAINT AND CAULK TO CABLE RAILING ITEMS. PROVIDING A CREDIT FOR INSTALLATION OF HINGED SAFETY RAILING ON CROSSBEAMS. ALSO, PERFORMING ADDITIONAL REVISIONS TO THE CABLE RAILING DURING FABRICATION AND RESOLVING CONFLICTS IDENTIFIED DURING FIELD INSTALLATION. ELIMINATING BID ITEM CABLE RAILINGS ON THE ORTHOTROPIC BOX GIRDER.

THIS CHANGE WAS APPROVED BY TBPOC ON APRIL 11, 2013.

ISSUE AND APPROVE IS CONDITIONAL ON THE FOLLOWING:

1. OBTAINING THE CONTRACTOR'S SIGNATURE ON THE CHANGE SINCE AGREED LUMP SUM IS SPECIFIED AS A METHOD OF PAYMENT. NOTE THAT FAILURE TO OBTAIN THE CONTRACTOR'S SIGNATURE WILL REQUIRE A REVISED CCO AND NEW I&A REQUEST.

TOOTAL COST FOR THIS CHANGE IS SHOWN AS \$1,536,378.00 WITH NO TIME ADJUSTMENT.

Items:	(\$450,000.00)
Force Account:	\$200,000.00
Agreed Price:	\$1,786,378.00
Adj. of Comp.	\$0.00

Total: \$1,536,378.00

Time: 0 (NONE)

Scott Jarvis,
Assistant Division Chief,
by:

Larry Salhaney

Division of Construction
1120 "N" Street, MS-44, Sacramento, CA 95814
Fax Number: (916) 654-5735
To Confirm Transmission, Call (916) 654-5259

Date: 4/19/2013

Page 2 of 2

Contract No.: 4 - 0120F4

Road: SF-80-13.2/13.9

FED. NO.: NONE

CCO No. 257

Sup. No.

0 Rev. No.

0

CCO Category Code: C - H - P - A

Continued:

TBPOC CONFERENCE CALL OUTCOME
April 11, 2013, 3:00pm – 4:00pm

Topic	Presenter	Outcome
1. CHAIR'S REPORT	S. Heminger, BATA	Information
2. CONSENT CALENDAR a. Contract Change Orders (CCOs) 1. SAS CCO 257 (Cable Railing Installation), \$1,536,378 2. YBITS1 CCO 159 S1 (YBI Tunnel Upper Deck LED Lighting), Not to Exceed \$1,350,000 3. YBITS1 CCO 165 So-S2 (Skyway & OTD1 Bike Path Repairs & Painting), \$2,100,000 4. YBITS1 CCO 564 So-S1 (Temporary OTD1 Bike Path Ramp Structure), Not to Exceed \$1,500,000	D. Noel, CTC	APPROVED APPROVED APPROVED¹ APPROVED
3. PROGRAM ISSUES a. Bay Bridge East Span Opening Celebration 1. Coordination/ Encroachment Permit Update	S. Maller, CTC	APPROVED²
4. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES a. Anchor Rod Update b. Independent Peer Review Panel Update	T. Anziano, CT T. Anziano, CT	APPROVED³ Information
5. OTHER BUSINESS		

- Item 2a3 was removed from the Consent Calendar for discussion and later approved by a 2 to 1 vote.
- The TBPOC (1) approved having fireworks on the bridge, (2) reaffirmed desire to have the opening ceremony on the SAS, and (3) requested BBA/Hartmann to not open public ticketed event registration before May 15, 2013.
- Although presented as an informational item, the TBPOC approved an expenditure of up to \$4.3M to (1) purchase replacement rods, (2) secure long lead materials for retrofit strategy B and C, and (3) to keep retrofit strategy A in play, but not to spend any of the approved \$ on it.

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 257 Suppl. No. 0 Contract No. 04 - 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Extra Work at Lump Sum:**ITEM 1.**

Perform additional field work for cable railing in accordance with CCO 188 "OBG Safety Railing (Furnish)" revised specifications and plan sheets 614R2, 615R2, 617R2, 618R2, 636S1, 641S2, 641S3, 641S4, 641S5, 805R2, 904R4, 908R2, 909S1R1, 909S2R1, 941R2, 953R2, 955R3, 955S1R2, 955S5, and 955S6, including:

- Install revised inboard and outboard cable railing, crossbeam railing, and Pier W2 cap beam railing.
- Install "NOT FOR TIEOFF" plaques on cable railing.
- Apply heat-shrink plastic boots to the cable where it connects with fittings.
- Install gates for access at crossbeams.
- Paint application of all new exterior steel and any areas of damaged existing paint shall be performed in accordance with Special Provisions Section 10-1.69 "CLEAN AND PAINT STRUCTURAL STEEL."
- Caulk around perimeter of post base plates and caulk abandoned bolt holes beneath post base plates.
- Provide a credit for installation of hinged safety railing on crossbeams that will not be performed.

For this work, the Contractor will receive a lump sum price of \$1,786,378.00. This sum constitutes full and complete compensation for furnishing all labor, material, tools and incidentals including all markups by reason of this change.

Extra Work at Lump Sum..... \$1,786,378.00

Extra Work at Force Account:**ITEM 2.**

As directed by the Engineer, perform additional revisions to the cable railing during fabrication and to resolve conflicts identified during field installation including Request for Information (RFI) numbers 3019 and 3038.

Labor, equipment and material authorized by the Engineer, as necessary, will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work" of the Standard Specifications and Section 5-1.24, "Force Account Payment" of the Special Provisions.

Estimated Cost of Extra Work at Force Account..... \$200,000.00

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO: 257 Suppl. No. 0 Contract No. 04 - 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

Decrease in Contract Item at Contract Price:

ITEM 3.

Eliminate cable railing.

Item No. 87: CABLE RAILING (MODIFIED)

-3,000 M (-100.00%) @ \$150.00 /M =-\$450,000.00 (-100.00%)

In accordance with Section 4-1.03B(3), "Eliminated Item," of the Standard Specifications, the adjustment due to the elimination of Item No. 87 is zero.

Total Cost for Decrease in Contract Item.....(\$450,000.00)

The following revised plan sheets detail the changes addressed in this change order: 636R4 and 641S1R2 (of 1204) as shown on sheets 3 through 4 of this change order.

CHANGE ORDER COST AND TIME SUMMARY

(ITEM 1) Extra Work at Lump Sum.....	\$1,786,378.00
(ITEM 2) Extra Work at Force Account.....	\$200,000.00
<u>(ITEM 3) Decrease in Contract Item at Contract Price</u>	<u>(450,000.00)</u>
Total net pay for this change order	\$1,536,378.00

This sum constitutes full and complete compensation for furnishing all labor, material, tools and incidentals including all markups by reason of this change.

The work referenced in this Contract Change Order (CCO) is not required for Seismic Safety Opening (SSO). Should effects resulting from the performance of this work, after achieving readiness for SSO and opening to public traffic, have an impact on the work performed additional warranted compensation will be provided in accordance with Standard Specifications Section 4-1.03, "Changes," under a separate Contract Change Order.

Estimated Cost: Increase ☒ Decrease ☐ \$1,536,378.00

By reason of this order the time of completion will be adjusted as follows: 0 Days

Submitted by

Signature

Resident Engineer

William Casey, Supervising T.E.

Date 9-30-13

Approval Recommended by

Signature

Program Manager

Tony Anziano, Program Manager

Date 9/30/13

Engineer Approval by

Signature

Program Manager

Tony Anziano, Program Manager

Date 5/9/13

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature

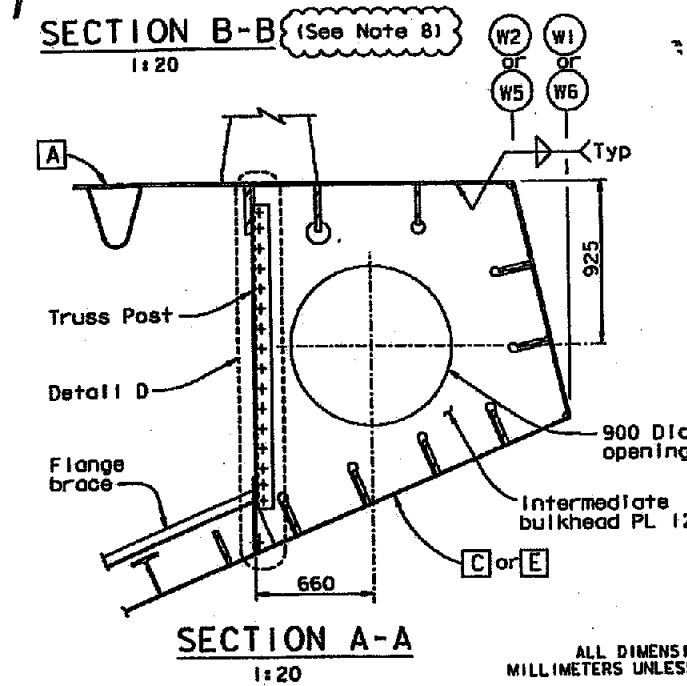
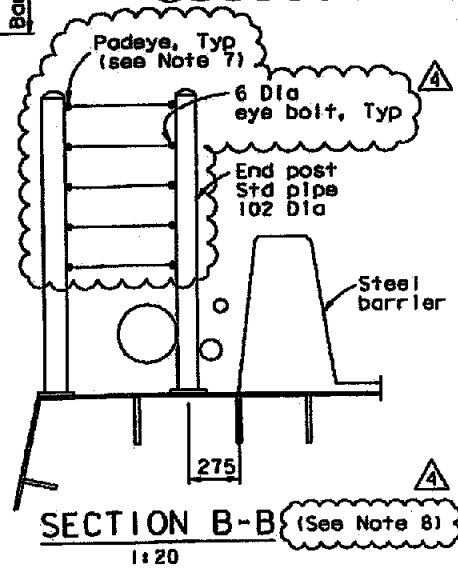
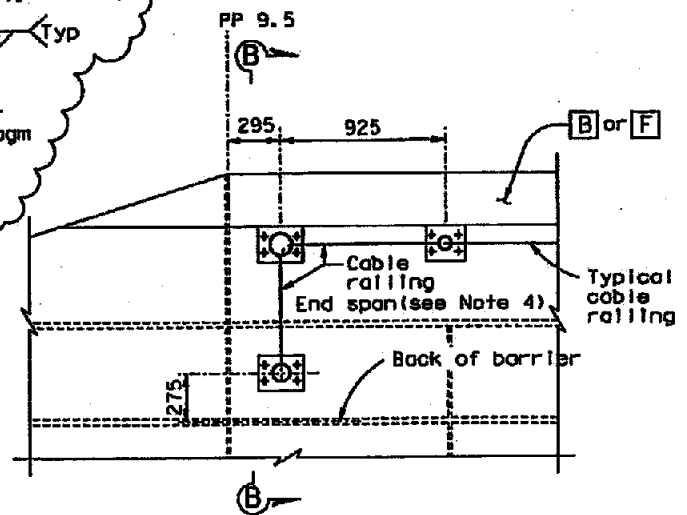
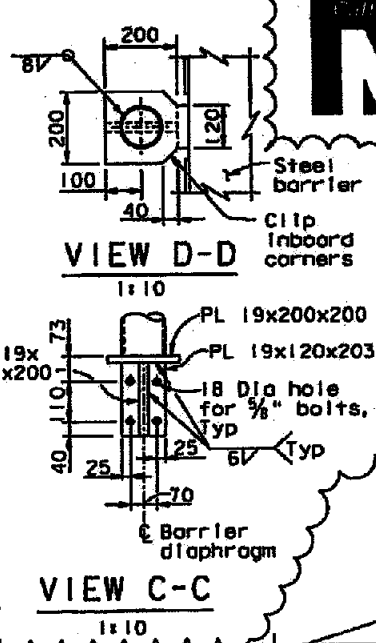
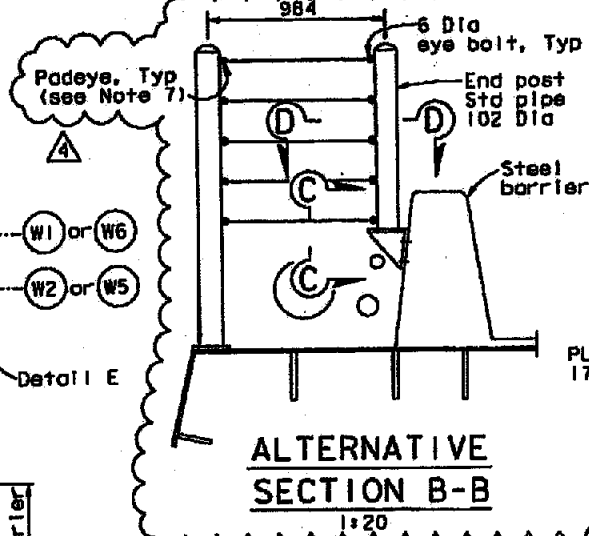
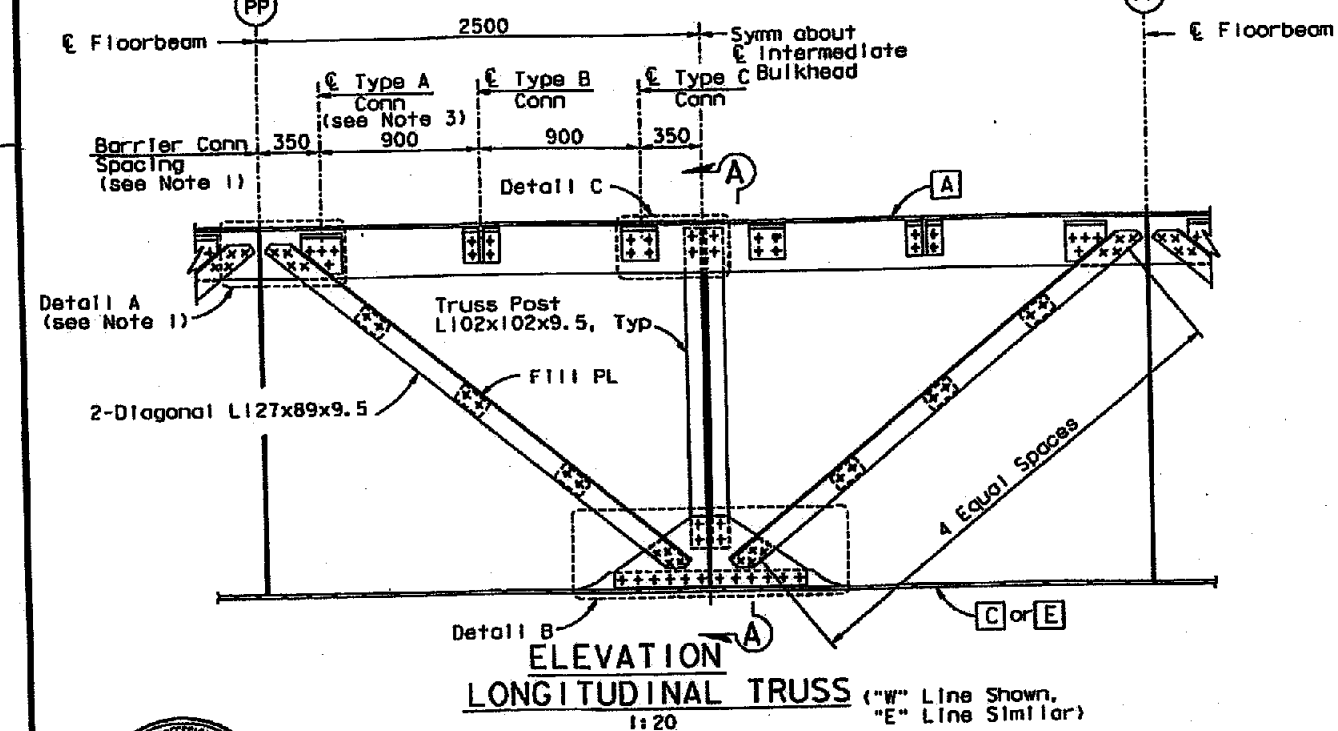
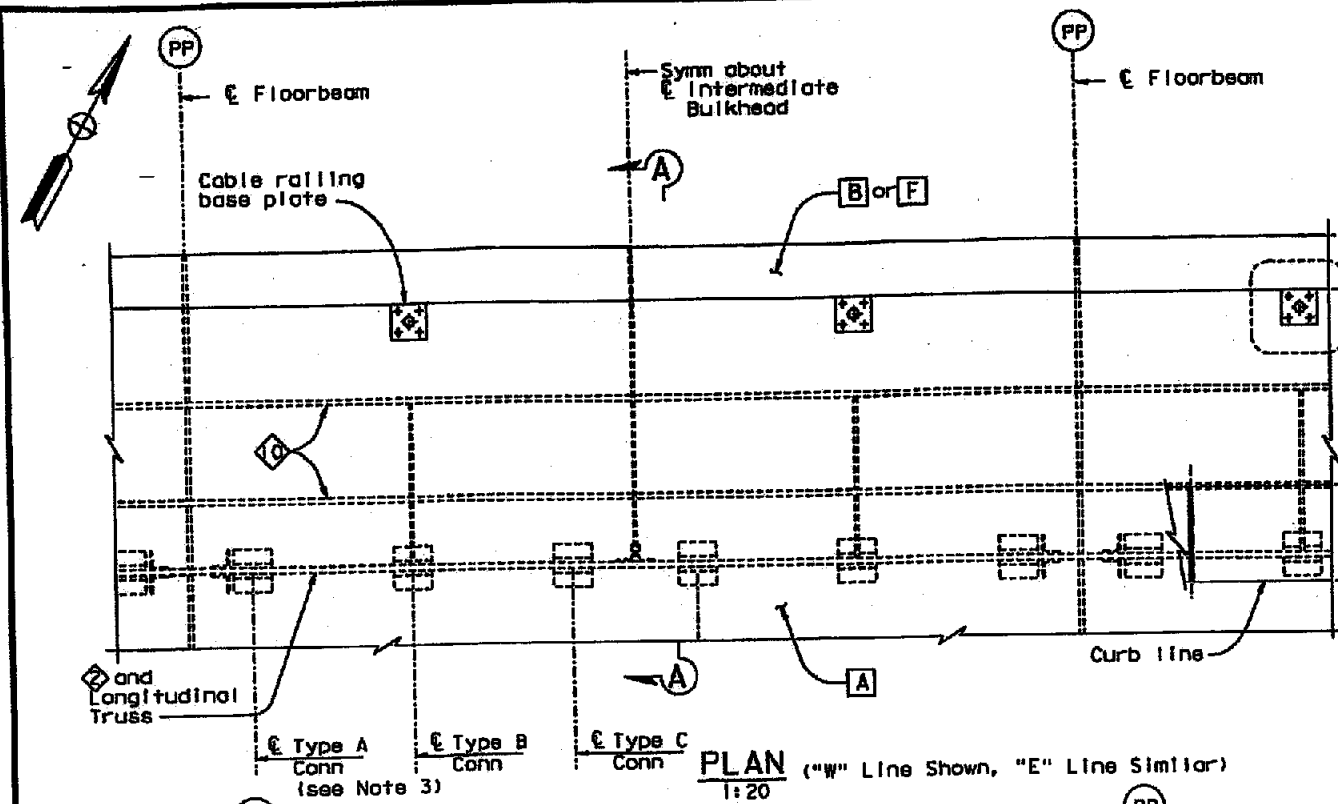
(Print name and title)

Date

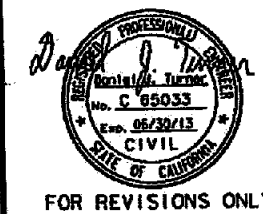
BRIAN A. PETERSEN - PROJECT DIRECTOR 02 MAY 13

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	636R4	1204

George Baker
REGISTERED ENGINEER - CIVIL
12-6-04
PLANS APPROVAL DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
T.Y. LIN / MOFFATT & NICHOL
825 BATTERY STREET
SAN FRANCISCO, CA 94111
Caltrans now has a web site! To get to the web site, go to: <http://www.dwt.com>



- NOTES:**
- For barrier connection details, see "Typical Girder Details No. 14" sheet.
 - For Details A, B, C, and D, see "Typical Girder Details No. 13" sheet.
 - For locations without a longitudinal truss, barrier connection Type C shall be used in lieu of connection Type A.
 - For details not shown, see "Typical Girder Details No. 17A, 17B and 17C" sheets.
 - For Detail E, see "Typical Girder Details No. 12A" sheet.
 - At the Contractor's option, a 8 mm fillet weld around the perimeter of the PL 20 may be used in lieu of 4 M20 bolts, subject to review and approval of the Engineer.
 - Padeyes shall be Crosby size 1-1/2 or equivalent.
 - At the Contractor's option, Alternative Section B-B may be used.



CONTRACT CHANGE ORDER NO. 257
SHEET 3 OF 4

MARK	DATE	DESCRIPTIONS	BY	CHK'D	CCO
1	04/11/13	CABLE RAILING INSTALL	AB	DT	257
2	11/16/11	CABLE RAILING	GB	DT	188
3	05/15/09	HANDRAIL	GB	DT	114
4	06/24/07	BARRIER MODIFICATIONS	GB	DT	44

DESIGN	BY	CHECKED	BY
DESIGN	G. Baker	CHECKED	P. Ritchie
DETAILS	C. Mauch	CHECKED	T. McMeans
QUANTITIES	G. Baker	CHECKED	M. Roberts

PREPARED FOR THE
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

R. Naranjo
PROJECT ENGINEER

BRIDGE NO. 34-0006L/R
KILOMETER POST 13.2/13.9
TYPICAL GIRDER DETAILS NO. 12

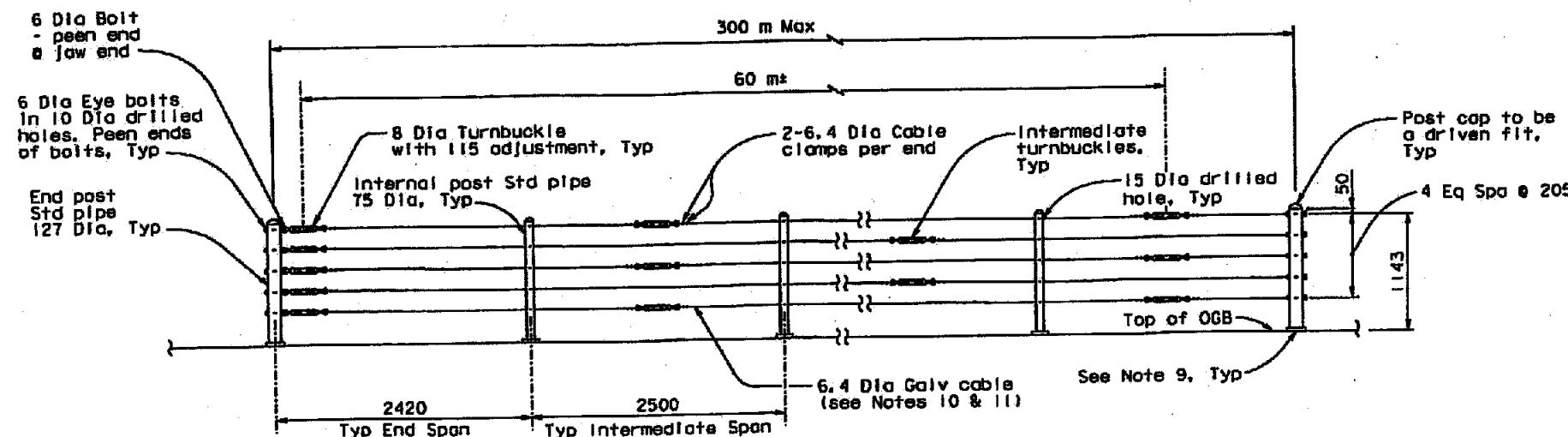
CU 04 EA 0120F1
DISCARD PRINTS BEARING EARLIER REVISION DATES
219R4



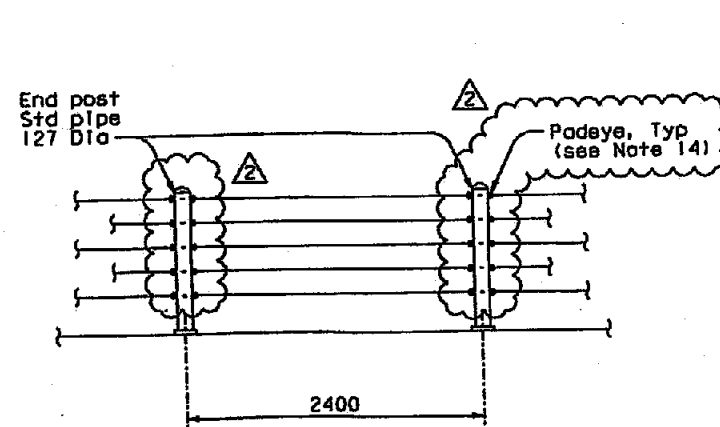
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF	80	13.2/13.9	641SR2	1204

Lin-Ho
REGISTERED ENGINEER - CIVIL
05-15-09
PLANS APPROVAL DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
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SAN FRANCISCO, CA 94111
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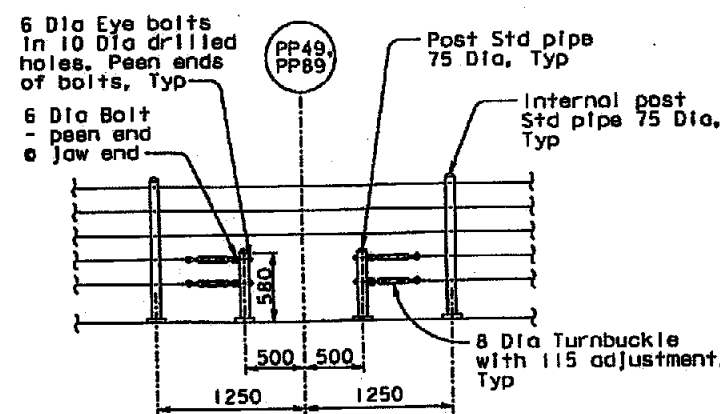
PROFESSIONAL ENGINEER
Tien Hung Ho
No. C 43990
Exp. 06/30/09
CIVIL
STATE OF CALIFORNIA



ELEVATION - TYPICAL



MID-SPAN CABLE BRACING DETAIL



ELEVATION AT UTILITY EXPANSION LOOPS - W2 LINE

CABLE RAILING - W2 LINE (E2 Similar) (See Note 12)
1:30

NOTES:

- Maximum distance between turnbuckles shall be 60 m±.
- Intermediate turnbuckles to be placed in adjacent spans.
- Cable shall not be spliced between Intermediate turnbuckles and end posts.
- All posts, cable and hardware to be galvanized.
- Posts to be vertical in the transverse direction and normal to the deck in the longitudinal direction.
- Alternative details may be submitted by the Contractor for approval by the Engineer.
- Typical end spans, braced in both directions, shall be constructed at changes in line where the angle of deflection is 15° or more.
- Provide thimbles at all cable loops.
- For post base details, see "Typical Girder Details No. 12A" sheet.
- The bottom cable shall terminate at the vertical posts on either side of the utility pipe expansion loops on the E2 Line.
- At the Engineer's direction, plastic-coated galvanized cable shall be used.
- Post spacings are for information only and shall be consistent with existing holes in the deck plates.
- A plastic boot or tape of the heat-shrink type shall be applied to the cable where it connects with fittings. The boot or tape shall extend over the fitting at least 25 mm.
- Padeyes shall be Crosby 1-1/2 or equivalent.



FOR REVISIONS ONLY

CONTRACT CHANGE ORDER NO. 257
SHEET 4 OF 4

REQUESTS FOR INFORMATION NOT ADDRESSED IN THIS CCO REMAIN IN FORCE					
MARK	DATE	DESCRIPTIONS	BY	CH'D	CCO#
Δ	04/11/13	CABLE RAILING INSTALL	AB	DT	257
Δ	04/11/13	CABLE RAILING	DT	HT	188
Δ	05/15/09	HANDRAIL	GB	TH	114

R. Valtizadeh/V. Toon/Y.L. /W.L. /F.C.
DESIGN OVERSIGHT
Rev. 04/17/13
Rev. Date: 5-10-08

DESIGN	BY G. Baker	CHECKED T. Ho
DETAILS	BY G. Baker	CHECKED T. Ho
QUANTITIES	BY G. Baker	CHECKED T. Ho

PREPARED FOR THE
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ALL DIMENSIONS ARE IN
MILLIMETERS UNLESS OTHERWISE SHOWN

R. Manzanarez
PROJECT ENGINEER

BRIDGE NO.
34-0006L/R
KILOMETER POST
13.2/13.9

SAN FRANCISCO OAKLAND BAY BRIDGE
EAST SPAN SEISMIC SAFETY PROJECT
SELF-ANCHORED SUSPENSION BRIDGE
(SUPERSTRUCTURE & TOWER)

TYPICAL GIRDER DETAILS NO. 17A

CU 04
EA 0120F1

DISREGARD PREVIOUS REVISION DATES

REVISION DATES (PRELIMINARY STATE ONLY)
SHEET 22451R2 OF 22451R2

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100% P&E

TIME PLOTTED -> 11:08:53
DATE PLOTTED -> 17 APR 2013